10th Nautical Information Provision Working Group Meeting (NIPWG10)

# S-128 Catalogue of Nautical Products

# Test Bed update

## Agenda Item 10.5A

NIPWG10, 12 - 15 Sep 2023 / Monaco

IHO

International Hydrographic Organization

# TABLE OF CONTENTS

1. S-128 CNP Development Progress
2. S-128 CNP Testing Version Update
    - Align with S-100 Ed 5.0.0 Change
    - Apply S-128 Ed 1.0.0 Comment
    - Define the definition of Attribute “Time Interval of Product”
3. Report S-128 Dataset Production Support
4. Future Plans

# S-128 CNP DEVELOPMENT PROGRESS

International Hydrographic Organization

- S-128 CNP Standard
  - Use exchanging the status of nautical products and providing up-to-dateness such as paper charts, electronic charts, S-100 based nautical products and etc.

- S-128 CNP Development Progress
  - Proposed by NIPWG 1st meeting in 2015, and approved by HSSC 7th meeting
  - In 2021, S-128 PS 1.0.0 Draft Release
  - In 2022, HSSC 14 approved S-128 Ed 1.0.0 for the testbed
  - Working on an update to the operational version
  - Operation version should be approved by August 2024

# S-128 CNP TESTING VERSION UPDATE

International Hydrographic Organization

- Testing with the KHOA S-100 TestBed
  - Tested S-128 Ed 1.0 with creation and testbed to validate structure and data model
  - Nothing technical issue with the S-128 Ed 1.0 data model

- S-128 Testing Version Ed 1.1.0 Update
  - In align with S-100 Ed 5.0.0
  - Apply S-128 Ed 1.0.0 Comment (Page 6)
  - Define the definition of Attribute “Time Interval of Product”

IHO

International Hydrographic Organization

# S-128 CNP TESTING VERSION UPDATE

- Align with the S-100 Ed 5.0.0 update
  - Add new attribute into S-128 FC
  - Change the dataset creation process
    - Change the GML encoding process
    - Add new attribute in Dataset Identification
    - Delete the Dataset Structure Information

- Apply S-128 Ed 1.0.0 Comment
  - Editorial, graphic revision to some paragraphs in PS (6 page)
  - Guidance for categorizing of Product Type attribute (7 page)
    - Value for S-101 ENC and S-10X products

# S-128 CNP TESTING VERSION UPDATE

International Hydrographic Organization

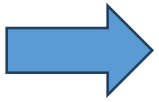
- Editorial revisions
  - PS Clause 6.2 3rd paragraph: “The S-128 domain model consists of two classes: feature type and information type. ….”

    ⇒ Proposed change: “The S-128 domain model has two base classes. The base class for geographic features is FeatureType and the base class for information types is InformationType.”

  - PS Clause 10.6 Unknown attribute values: use an S-128 feature as the example, instead of using the landmark feature which is not applicable in S-128.

    ⇒ Proposed change

```
<Landmark>
  <categoryOfLandmark xsi:nil="true"/>
  <function>radio</function>
  … other attributes…
 … <status> is NOT coded …
<Landmark>
```



```
<S128:NauticalProduct>
  <publicationNumber xsi:nil="true"/>
  <datasetName>128KR00</datasetName>
  … other attributes…
 … <keywords> is NOT coded …
</S128:NauticalProduct >
```

# S-128 CNP TESTING VERSION UPDATE

International Hydrographic Organization

- Propose guidance of Product Type attribute

| S-128 Feature Model | Paper Chart | Electronic Chart | Nautical Production |
|---|---|---|---|
| Product / Data | Paper/Raster Chart | S-57, S-101 | S-102, S-104, S-111, S-124, S-129 |
| Product Type | Paper nautical chart / raster nautical chart | ENC | S-100 compliant product |

- This guidance will be reflected in the DCEG

# S-128 CNP TESTING VERSION UPDATE

International Hydrographic Organization

- Propose definition “Time Interval of Product”
  - Compare GI Registry Data Dictionary

| Attribute | Data Type | Multiplicity | IHO Definition |
|---|---|---|---|
| Time Interval of Product | Complex | 0,1 | X |
| Issue Date | Date | 1,1 | O |
| Expiration Date | Date | 0,1 | O |
| Time Reference | Enum | 1,1 | O |
| Issuance Cycle | Complex | 0,1 | X |
| Time Interval of Cycle | Complex | 0,1 | X |
| Type of Time Interval Unit | Enum | 1,1 | O |
| Value of Time | Integer | 1,1 | X |
| Periodic Date Range | Complex | 0,1 | O |
| Start Date | Date | 1,1 | O |
| End Date | Date | 1,1 | O |

# S-128 CNP TESTING VERSION UPDATE

International Hydrographic Organization

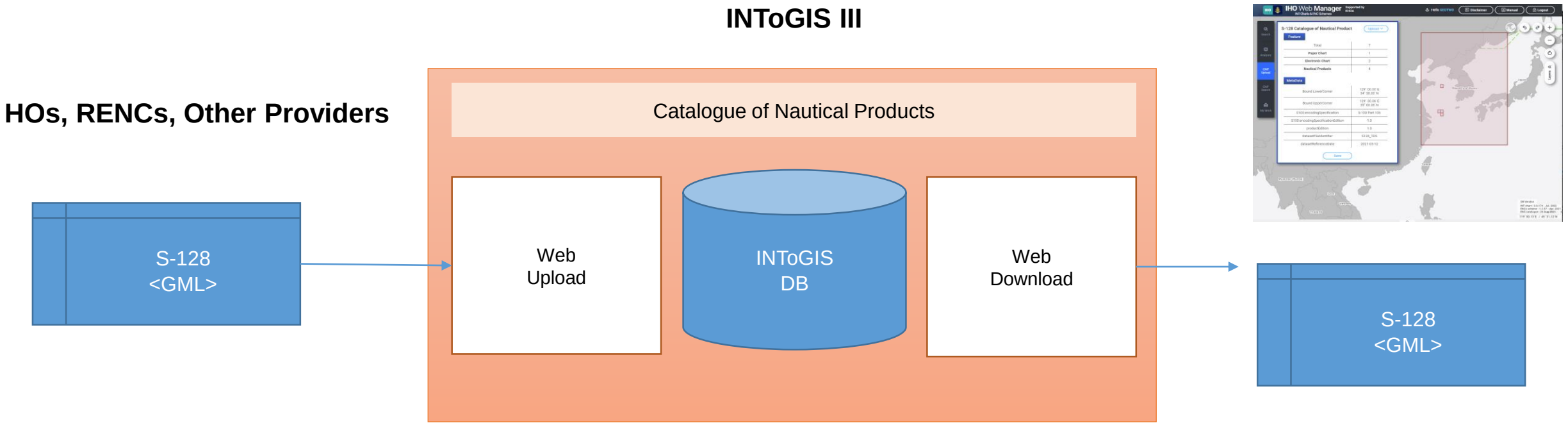
- Propose definition “Time Interval of Product”

| Attribute | Data Type | Definition |
|---|---|---|
| Time Interval of Product | Complex | The temporal interval over which the product is issued |
| Issue Date | Date | Creation date of nautical product data |
| Expiration Date | Date | Expiration date of nautical product data |
| Time Reference | Enum | Information about time reference |
| Issuance Cycle | Complex | The cycle of issuing the nautical product data |
| Time Interval of Cycle | Complex | The temporal interval over which the cyle of issuing the nautical product data |
| Type of Time Interval Unit | Enum | Type of Time Interval Unit |
| Value of Time | Integer | Actual time for time interval units |
| Periodic Date Range | Complex | The active period of a recurring event or occurrence. |
| Date Start | Date | The earliest date on which an object (for example a buoy) will be present. |
| Date End | Date | The latest date on which an object (for example a buoy) will be present. |

# REPORT S-128 DATASET PRODUCTION SUPPORT

International Hydrographic Organization

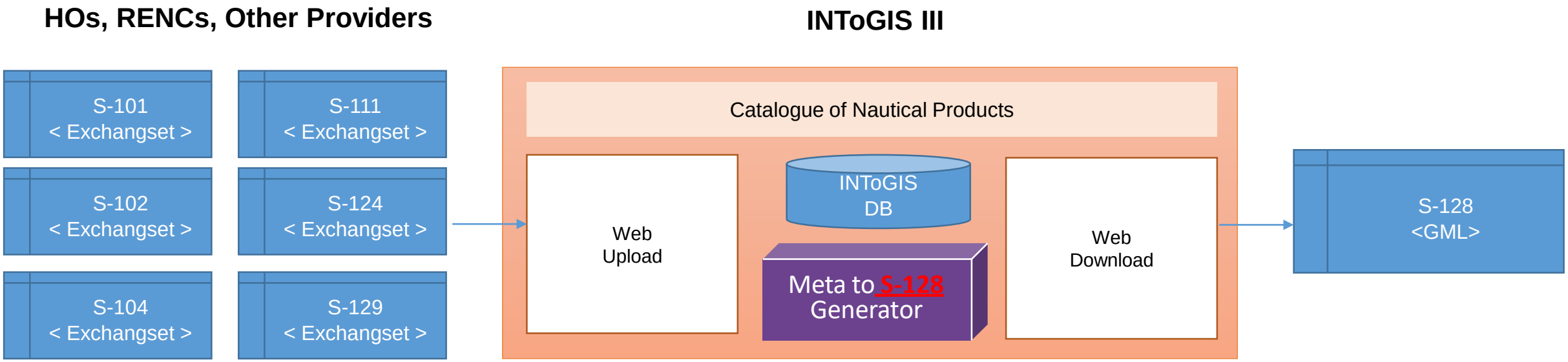
- Support for creating S-128 dataset
  - WENDWG S-100 Principle determines the use of INToGIS to support information on the development and production status of S-1XX Products
  - Expand INToGIS for S-100 based products
    - Collect S-128 dataset from different HOs and regenerate new S-128 dataset



# REPORT S-128 DATASET PRODUCTION SUPPORT

International Hydrographic Organization

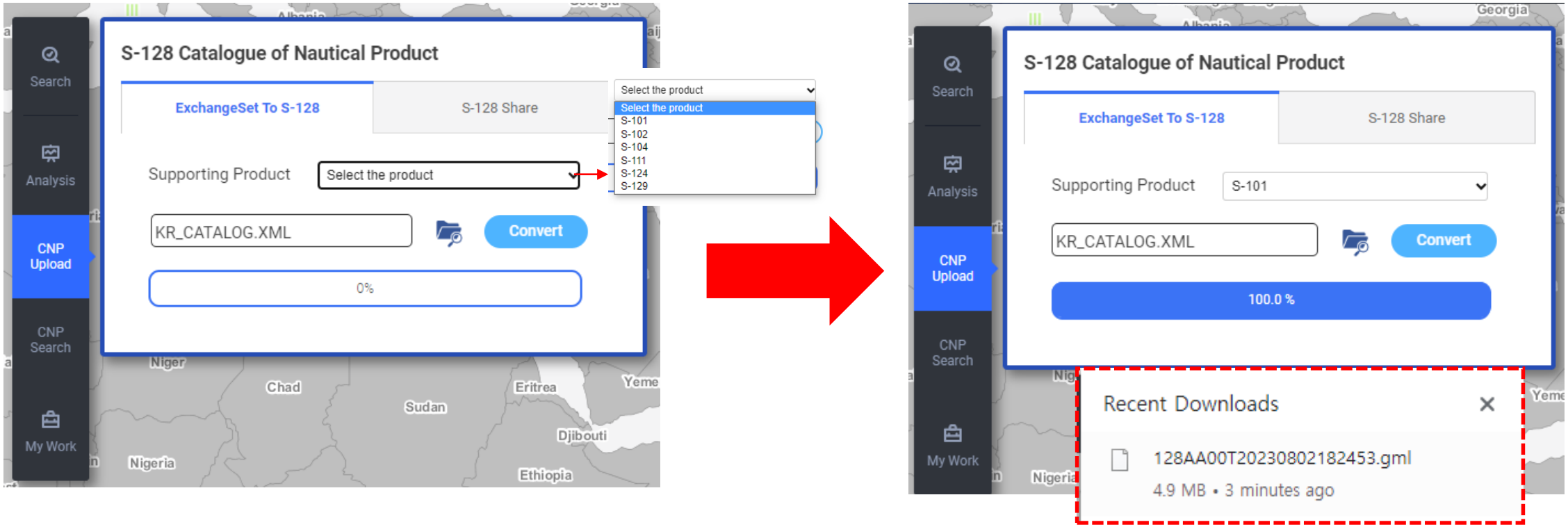
- Support for creating S-128 1.0.0. dataset
  - Add ability to generate S-128 dataset from member state's S-10X metadata for comment on S-128 updates
  - Test Site : http://119.195.114.103/s128Beta
    - Test Account(ID/PW) : T-S128 / test128



# REPORT S-128 DATASET PRODUCTION SUPPORT

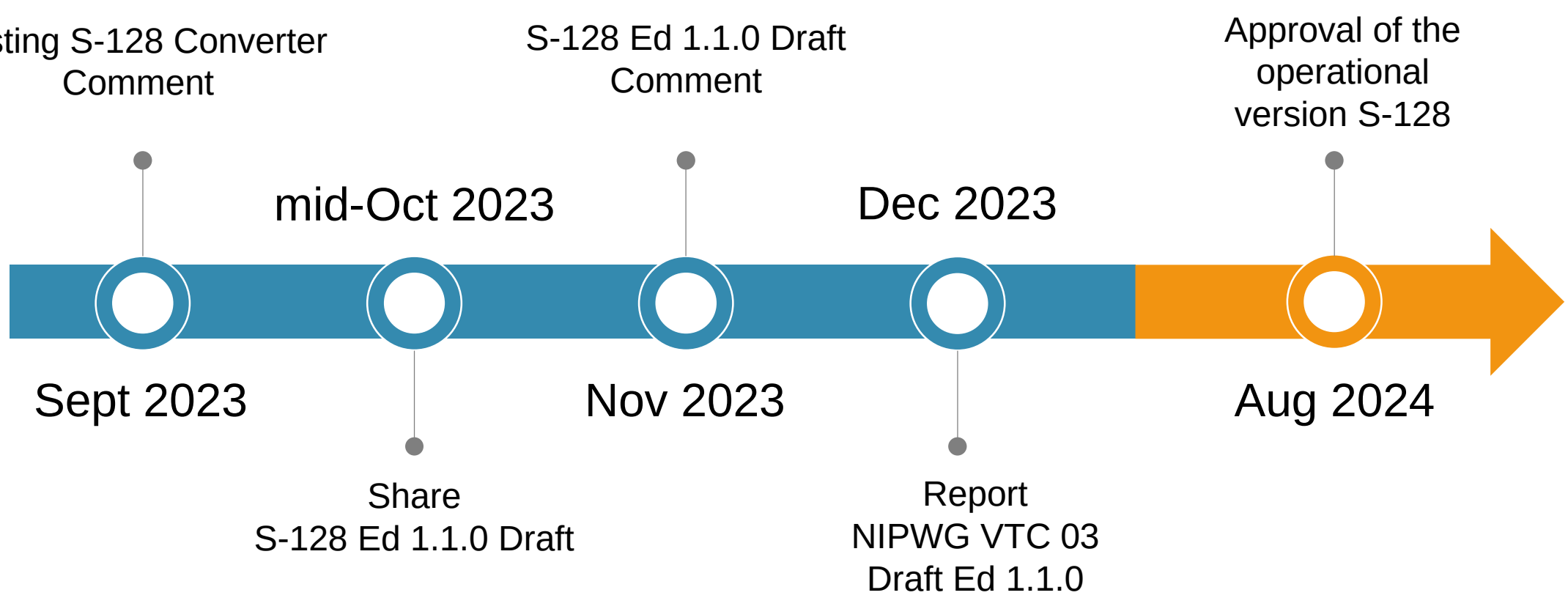
International Hydrographic Organization

- Support for creating S-128 dataset
  - S-10x metadata converted to an S-128 dataset file



# FUTURE PLANS

International Hydrographic Organization



IHO

International
Hydrographic
Organization

# Thank you